Claims

We claim:

1. In a system comprising at least a first device, a second device and a routing infrastructure comprising a plurality of routers used to communicate information between the first device and the second device, a method comprising the steps of:

at the first device:

receiving an anycast address;

injecting an updated route to the anycast address into the routing infrastructure each time the first device roams to a different subnet;

sending a binding update to the second device informing the second device of the anycast address; and

receiving information from the second device via the anycast address regardless of a location of the first device in the system.

2. The method of claim 1 wherein the anycast address is topologically independent.

3. The method of claim 1 wherein the anycast address remains constant while the first device is powered on.

4. The method of claim 1 wherein the second device is a home agent for the first device.

5. The method of claim 1 wherein the second device is a correspondent device in the system.

6. The method of claim 1 wherein the step of receiving an anycast address is performed when the first device is powered on.

7. The method of claim 1 wherein the step of receiving an anycast address is performed when the first device roams to a first foreign subnet.

8. The method of claim 1 wherein the anycast address is an anycast care-of-address.

9. The method of claim 1 wherein the anycast address is an anycast home address.

10. The method of claim 1 wherein the location of the first device is transparent to the second device.

11. The method of claim 1 further comprising the steps of:

attaching to a mobile router; and

receiving information from the second device via an address assigned to the mobile router.

12. The method of claim 11 further comprising the steps of:

de-attaching from the mobile router;

attaching to a new subnet;

injecting an updated route to the anycast address into the routing infrastructure; and

receiving information from the second device via the anycast address.